



## ENVOY<sup>®</sup> Herbicide

Active Ingredient ..... By Wt.  
\*Clethodim ..... 12.6%  
Other Ingredients ..... 87.4%  
Contains Petroleum Distillates  
\*(E)-2[1-[[[3-chloro-2-propenyl]oxy]imino] propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one  
Contains 0.94 lbs. clethodim per gal.

U.S. Pat. No. 4,440,566 R.E. 32,489

### KEEP OUT OF REACH OF CHILDREN

## WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

#### WARNING

Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed or inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### STATEMENT OF PRACTICAL TREATMENT

- If in eyes:** Flush with plenty of water. Get medical attention.
- If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.
- If swallowed:** Give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take person and product container to the nearest medical emergency treatment center or hospital.
- If inhaled:** Remove person from exposure area.

**Note to Physicians:** Emergency Information - call 1-800-892-0099. This product contains a light petroleum solvent, and an aspiration hazard may exist.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:** Coveralls over short-sleeved shirt and short pants, chemical-resistant gloves, such as Barrier Laminate or Viton  $\geq$  14 mils, chemical-resistant footwear plus socks, protective eyewear, chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate.

The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist:

**Solano Grass:** Solano County, California: the vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south, and Travis Air Force Base to the west.

**Wild Rice:** Hays County, Texas.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**READ ENTIRE LABEL AND PAMPHLET. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is: coveralls over short-sleeved shirt and short pants, chemical-resistant gloves, such as Barrier Laminate or Viton  $\geq$  14 mils, chemical-resistant footwear plus socks, protective eyewear and chemical-resistant headgear for overhead exposure.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

Do not enter treated areas without protective clothing until sprays have dried.

#### DISCLAIMER, CONDITIONS OF SALE, LIMITED WARRANTY AND LIMITATION OF LIABILITY

**IMPORTANT: Read the entire Label including this Disclaimer, Limited Warranty and Limitation of Liability before using this product. If the terms are not acceptable, return the unopened product within 15 days of purchase.**

##### RISKS OF USING THIS PRODUCT

It is impossible to eliminate all risks associated with the use of this product. Such risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, moisture conditions, irrigation practices, presence of other materials, cultural practices or the manner of use or application, all of which are factors beyond the control of Valent. **All such risks shall be assumed by the Buyer.**

Valent shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on the label. User assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

##### LIMITED WARRANTY

Valent warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the **Risks of Using This Product** described above.

#### DISCLAIMER OF ALL OTHER WARRANTIES

**VALENT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

#### LIMITATION OF LIABILITY

**In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THIS PRODUCT.**

#### NO AMENDMENTS

Valent and Seller offer this product, and Buyer and User accept it, subject to the foregoing **Disclaimer, Conditions of Sale, Limited Warranty and Limitation of Liability**, which may not be modified by any oral or written agreement.

#### PROMPT NOTICE OF CLAIM

Valent must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from date of application) so that an immediate inspection of the affected property and growing crops can be made. Unless Buyer and Users shall promptly notify Valent of any claims, they shall be barred from obtaining any remedy.

#### TANK MIXES

**NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.**

Read and follow the entire label of each product to be used in the tank mix with this product.

#### GENERAL INFORMATION

**Do not apply this product through any type of irrigation system.**

**FOR USE ON:** Ornamentals, Conifer Trees, Non-Bearing Food Crops, and Non-Crop or Non-Planted Areas.

ENVOY Herbicide is a selective postemergence herbicide for control of annual and perennial grasses. ENVOY Herbicide does not control sedges or broadleaf weeds.

Repeated use of ENVOY Herbicide (or similar postemergence grass herbicide with the same mode of action) may lead to the selection of naturally occurring biotypes that are resistant to these products in some grass species.

If poor performance occurs and cannot be attributed to adverse weather or application conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies such as crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

Do not allow ENVOY Herbicide to come in contact with desirable grass crops such as corn, rice, sorghum, small grains or turf, as these and other grass crops will be injured or killed.

Minor leaf spotting may occur on treated plants under certain environmental conditions. New foliage is not affected.

**Control Symptoms:** Treated grass weeds show a reduction in vigor and growth. Early chlorosis/necrosis of younger plant tissue is followed by a progressive collapse of the remaining foliage. Symptoms will generally be observed in 7 to 14 days depending on grass species treated and environmental conditions.

## APPLICATION INFORMATION

**Timing of Applications:** Apply ENVOY Herbicide postemergence to actively growing grasses according to rate table recommendations. Applications made to grass plants stressed by insufficient moisture or cold temperatures, or to grass plants exceeding recommended growth stages may result in unsatisfactory control. Do not apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, ENVOY Herbicide should be applied as soon as possible after an irrigation (within 7 days). In arid regions, a second application of ENVOY Herbicide will generally provide more effective control of perennial grass weeds than a single application. Make second application to actively growing grass 2 to 3 weeks after emergence of new growth.

Cultivation of treated grasses 7 days prior to or within 7 days after application of ENVOY Herbicide may reduce weed control. DO NOT APPLY ENVOY Herbicide if rainfall is expected within one hour, since control may be reduced.

## ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

Crop	Adjuvant Recommendations
Ornamental Plants	Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Use of crop oil concentrate is not recommended since it may injure flowers and foliage.
Conifer Trees, Non-bearing Food Crops, and Non-Crop or Non-Planted Areas	Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt. per acre) in the finished spray volume.

**Ground Application:** Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 40 gals. of spray solution per acre. Under the following conditions a minimum of 10 gals. per acre is required: narrow row soybeans, broadleaf herbicide tank mixes, perennial grasses, volunteer corn, drought or stress conditions, heavy grass pressure or when grasses are at or near maximum height. Failure to use a minimum of 10 gals. per acre under these conditions can result in poor coverage and reduced grass control requiring repeat applications. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

**Air Application:** Use a minimum of 3 gals. of spray solution per acre. Increase spray volumes up to 10 gals. as grass or crop foliage becomes dense.

In California, applications to onions, garlic and shallots should be made in a minimum of 20 gals. of spray solution per acre. In areas outside of California do not exceed 17 fl. oz./A of ENVOY Herbicide in a single application by air.

**Spot Treatment:** When using hand sprayers or high volume sprayers utilizing hand guns, mix ½% to 1% (0.65 oz. to 1.3 oz. per gal.) ENVOY Herbicide and treat to wet vegetation, while not allowing runoff of spray solution. For uses requiring crop oil concentrate, include crop oil concentrate at 1% (1.3 oz. per gal.) by volume. For uses requiring non-ionic surfactant, include non-ionic surfactant at ¼% (0.33 oz. per gal.) by volume.

## RESTRICTIONS AND LIMITATIONS

### GENERAL

Do not apply if rain is expected within 1 hour of application as control may be unsatisfactory.

Do not apply a postemergence broadleaf herbicide within one day following application of ENVOY Herbicide or reduced grass control may result.

Do not apply more than 68 fl. oz. of ENVOY Herbicide (0.5 lb. ai) per acre per season. Application on Long Island, New York, is restricted to no more than 34 fl. oz. of ENVOY Herbicide (0.25 lb. ai.) per acre per season.

Do not apply under conditions of stress. Applying ENVOY Herbicide under conditions that do not promote active grass growth will reduce herbicide effectiveness. These conditions include

drought, excessive water, extremes in temperature and low humidity. Grasses under these kinds of stressful conditions will not absorb and translocate ENVOY Herbicide effectively, and will be less susceptible to herbicide activity.

Best perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up results in a very staggered, non-uniform weed emergence. No fewer than two ENVOY Herbicide applications per season per year are recommended at the appropriate weed-growth stage rate under continuous no-till conditions.

Grass crops such as corn, sorghum, wheat, rice, etc. are highly sensitive to ENVOY Herbicide.

Always read and follow the restrictions and limitations for all products whether used alone or in a tank mix. The most restrictive labeling of any product used applies in tank mixtures, including all crop rotational and other crop restrictions.

Tank mixes of ENVOY Herbicide and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs an additional application of ENVOY Herbicide may be necessary.

## AVOID SPRAY DRIFT

Do not allow spray from ground or aerial equipment to drift onto adjacent land or crops. When drift may be a problem, do everything possible to reduce spray drift, including:

- Do not spray if wind speeds are or become excessive. Do not spray if wind speed is 10 mph or greater. If sensitive crops or plants are downwind, extreme caution must be used under all conditions. Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive plants are located nearby.
- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Further reductions in drift can be obtained by:
  - (1). Using large droplet size sprays. Do not use nozzles that produce small droplets. Orient nozzles downward and slightly backward as needed to reduce drift for ground applications.
  - (2). Orienting nozzles straight back with the windstream, using straight stream orifices for aerial applications. Use the lowest number of nozzles practical with the largest possible orifice size to obtain the minimum 3 GPA volume. Application height and boom length should be set according to manufacturer's instructions to minimize drift.
  - (3). Increasing the volume of spray mixture (for example a minimum of 10 GPA for ground applications) by using higher flow rate nozzles. Using lower pressure with the appropriate nozzle to obtain higher volumes will also reduce drift.
  - (4). Applying as close to target plants as practical while maintaining a good spray pattern for adequate coverage.

**Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.**

## ORNAMENTALS

Sugar maples cannot be tapped for syrup within one year of ENVOY application.

### DIRECTIONS FOR USE IN ORNAMENTALS

For ornamental plant uses, ENVOY Herbicide can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses and around outdoor ornamentals, including nurseries, parks, roadside plantings and structure landscapes.

IMPORTANT
ENVOY Herbicide successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to ENVOY Herbicide at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of ENVOY Herbicide have investigated the safety factor to ornamental plants not listed on the label.

The following plants have shown a tolerance for ENVOY Herbicide applications:

ORNAMENTAL TREES	
COMMON NAME	SCIENTIFIC NAME
Alder, Red	<i>Alnus oregona</i>
Ash	<i>Fraxinus</i> spp.
Basswood	<i>Tilia</i> spp.
Birch, European White	<i>Betula pendula</i>
Birch, River	<i>Betula nigra</i>
Birch, White	<i>Betula papyrifera</i>
Crabapple, Flowering	<i>Malus halliana</i>
Dogwood, Flowering	<i>Cornus florida</i>
Golden Chain Tree	<i>Laburnum anagyroides</i>
Maples	<i>Acer</i> spp.
Mulberry, White	<i>Morus alba</i>
Oaks	<i>Quercus</i> spp.
Olive, Wild	<i>Elaeagnus angustifolia</i>
Redbud	<i>Cercis canadensis</i>
Sweet Gum	<i>Liquidambar styraciflua</i>

GARDEN FLOWERS AND PLANTS	
COMMON NAME	SCIENTIFIC NAME
Ageratum	<i>Ageratum</i> spp.
Alyssum*	<i>Lobularia maritima</i>
Asparagus Fern	<i>Asparagus setaceus</i>
Bleeding Heart	<i>Dicentra spectabilis</i>
Cast Iron Plant	<i>Aspidistra elatior</i>
Chrysanthemum	<i>Chrysanthemum</i> spp.
Cinquefoil	<i>Potentilla</i> spp.
Coleus	<i>Coleus</i> spp.
Coral Bells	<i>Heuchera sanguinea</i>
Cranesbill	<i>Geranium</i> spp.
Dahlia	<i>Dahlia</i> spp.
Daisy, African	<i>Osteospermum fruticosum</i>
Daylily	<i>Hemerocallis</i> spp.
Dusty Miller	<i>Senecio cineraria</i>
Euonymus	<i>Euonymus</i> spp.
Gazania	<i>Gazania</i> spp.
Geranium, House	<i>Pelargonium hortorum</i>
Heather	<i>Cuphea hyssopifolia</i>
Hosta	<i>Hosta fortunei</i>
Iris	<i>Iris</i> spp.
Jasmine Tobacco	<i>Nicotiana glauca</i>
Loosestrife	<i>Lythrum salicaria</i>
Marigold	<i>Tagetes</i> spp.
Mitchella repens	<i>Mitchella repens</i>
Petunia*	<i>Petunia hybrida</i>
Phlox	<i>Phlox</i> spp.
Pinks	<i>Dianthus</i> spp.
Portulaca	<i>Portulaca grandiflora</i>
Salvia	<i>Salvia</i> spp.
Saxifrage	<i>Saxifraga</i> spp.
Sedum	<i>Sedum</i> spp.
Selloum	<i>Philodendrum selloum</i>
Snapdragon*	<i>Antirrhinum majus</i>
Sweet Flag	<i>Lacorus gramineus</i>
Tickseed	<i>Coreopsis grandiflora</i>
Touch-Me-Not	<i>Balsamorhiza</i> spp.
Verbena	<i>Verbena</i> spp.
Violet	<i>Viola</i> spp.
Yarrow, Common	<i>Achillea millefolium</i>
Zinnia	<i>Zinnia elegans</i>

\* Slight foliage or flower speckling has been observed on these species.

GROUND COVERS	
COMMON NAME	SCIENTIFIC NAME
Bugleweed, Carpet	<i>Ajuga reptans</i>
Ivy, English	<i>Hedera helix</i>
Japanese Spurge	<i>Pachysandra terminalis</i>
Lilyturf	<i>Liriope muscari</i>
Moneywort	<i>Lysimachia nummularia</i>
Mondo Grass, White	<i>Ophiopogon japonicus</i>
Mondo Grass, Dwarf	<i>Ophiopogon japonicus</i>
Periwinkle, Common	<i>Vinca minor</i>

SHRUBS	
COMMON NAME	SCIENTIFIC NAME
Abelia	<i>Abelia</i> spp.
Anise, Purple	<i>Illicium floridanum</i>
Aucuba	<i>Aucuba</i> spp.
Azalea*	<i>Rhododendron</i> spp.
Bamboo	<i>Bambusa</i> spp.
Barberry, Japanese	<i>Berberis thunbergii</i>
Barberry, Magellan	<i>Berberis buxifolia</i>
Bayberry	<i>Myrica pensylvanica</i>
Bottlebrush	<i>Callistemon citrinus</i>
Boxwood	<i>Buxus sempervirens</i>
Camellia	<i>Camellia japonica</i>
Candytuft	<i>Iberis sempervirens</i>
Cleyer	<i>Cleyera japonica</i>
Coralberry	<i>Ardisia crenata</i>
Crape Myrtle	<i>Lagerstroemia indica</i>
Coyote Brush	<i>Baccharis pilularis</i>

SHRUBS	
COMMON NAME	SCIENTIFIC NAME
Fig, Creeping	<i>Ficus pumila</i>
Gardenia	<i>Gardenia</i> spp.
Holly	<i>Ilex</i> spp.
Honeysuckle	<i>Lonicera pileata</i>
Indian Hawthorn	<i>Raphiolepis indica</i>
Jasmine	<i>Jasminum</i> spp.
Jasmine, Asiatic	<i>Trachelospermum asiaticum</i>
Jasmine, Confederate	<i>Trachelospermum jasminoides</i>
Juniper	<i>Juniperus</i> spp.
Lantana	<i>Lantana</i> spp.
Nandina*	<i>Nandinia domestica</i>
Oleander, Common	<i>Nerium oleander</i>
Oregon Grape	<i>Mahonia aquifolium</i>
Photinia	<i>Photinia</i> spp.
Pittosporum	<i>Pittosporum</i> spp.
Podocarpus	<i>Podocarpus</i> spp.
Privet	<i>Ligustrum</i> spp.
Pyracantha	<i>Pyracantha</i> spp.
Rhododendron	<i>Rhododendron</i> spp.
Rose	<i>Rosa</i> spp.
Spirea	<i>Spirea bumalda</i>
Tea Olive	<i>Osmanthus fragrans</i>
Viburnum	<i>Viburnum tinus</i>
Wisteria	<i>Wisteria</i> spp.
Yellow Sage	<i>Lantana camera</i>

\* Slight foliage or flower speckling has been observed on these species.

#### RECOMMENDATIONS FOR ANNUAL GRASSES IN ORNAMENTALS

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

Grass Species	Scientific Name	Weed* Height - Inches	Rate fl. oz./ Acre	High Rate
			(1)	(2)
Barnyardgrass	<i>Echinochloa crus-galli</i>	2-8	17	34
Broadleaf	<i>Brachiaria platyphylla</i>	2-6	17	34
Signalgrass				
Brome				
California	<i>Bromus carinatus</i>	2-6	17	34
Cheatgrass	<i>Bromus secalinus</i>	2-6	17	34
Downy	<i>Bromus tectorum</i>	2-6	17	34
Ripgut	<i>Bromus diandrus</i>	2-6	17	34
Crabgrass				
Hairy	<i>Digitaria adscendeus</i>	2-6**	17	34
Large	<i>Digitaria sanguinalis</i>	2-6**	17	34
Smooth	<i>Digitaria ischaemum</i>	2-6**	17	34
Southern	<i>Digitaria ciliaris</i>	2-6**	17	34
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2-6**	17	34
Fall panicum	<i>Panicum</i>	2-8	17	34
	<i>dichotomiflorum</i>			
Field Sandbur	<i>Cenchrus incertus</i>	2-6	17	34
Foxtail				
Giant	<i>Setaria faberi</i>	2-12	17	34
Green	<i>Setaria viridis</i>	2-8	17	34
Yellow	<i>Setaria glauca</i>	2-8	17	34
Goosegrass	<i>Eleusine indica</i>	2-6**	17	34
Itchgrass	<i>Rottboellia exaltata</i>	2-6	17	34
Junglerice	<i>Echinochloa colona</i>	2-6	17	34
Lovegrass	<i>Eragrostis cilanensis</i>	2-6	17	34
(Stinkgrass)				

Grass Species	Scientific Name	Weed* Height - Inches	Rate fl. oz./ Acre	High Rate
<b>Continued</b>			(1)	(2)
Red Rice	<i>Oryza sativa</i>	1-3	17	34
Ryegrass				
Hardy	<i>Lolium perenne</i>	2-6	17	34
Italian	<i>Lolium multiflorum</i>	2-6	17	34
Seedling	<i>Sorghum halepense</i>	4-10	17	34
Johnsongrass				
Shattercane	<i>Sorghum bicolor</i>	6-18	17	34
Southwestern	<i>Erochloa gracilis</i>	2-6	17	34
Cupgrass				
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2-6	17	34
Bearded	<i>Leptochloa fascicularis</i>	2-6	17	34
Mexican	<i>Leptochloa uninervia</i>	2-6	17	34
Red	<i>Leptochloa filiformis</i>	2-6	17	34
Texas Panicum	<i>Panicum texanum</i>	2-6	17	34
Volunteer				
Cereals				
Barley	<i>Hordeum vulgare</i>	2-6	17	34
Oats	<i>Avena sativa</i>	2-6	17	34
Rye	<i>Secale cereale</i>	2-6	17	34
Wheat	<i>Triticum aestivum</i>	2-6	17	34
Volunteer Corn	<i>Zea mays</i>	4-12	13	17
Volunteer Corn	<i>Zea mays</i>	12-24	17	34
Volunteer Grain	<i>Sorghum bicolor</i>	8-12	17	34
Sorghum				
Wild Oats	<i>Avena fatua</i>	2-6	17	34
Wild Proso	<i>Panicum miliaceum</i>	2-10	17	34
Millet				
Witchgrass	<i>Panicum capillare</i>	2-8	17	34
Woolly	<i>Eriochloa villosa</i>	2-8	17	34
Cupgrass				

\* Generally occurs between 3-leaf stage and tillering.

\*\* Length of lateral growth.

17 fl. oz./acre = approximately 0.4 fl. oz./1000 sq. ft.

34 fl. oz./acre = approximately 0.8 fl. oz./1000 sq. ft.

Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

RECOMMENDATIONS FOR ANNUAL BLUEGRASS CONTROL WITH ENVOY HERBICIDE IN ORNAMENTALS			
Grass Species	Weed Stage	Rate fl. oz./ Acre	High Rate
Annual Bluegrass ( <i>Poa annua</i> )	to 4-Leaf	13	34
Apply under favorable soil moisture and humidity which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).			
Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.			
Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.			
Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).			

#### RECOMMENDATIONS FOR PERENNIAL GRASSES IN ORNAMENTALS

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

Grass Species	Weed Height - Inches	Rate fl. oz./ Acre	High Rate
Bermudagrass ( <i>Cynodon dactylon</i> )		(1)	(2)
First Application	3 (or up to 6" runners)	17	34
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	17	34
Foxtail Barley ( <i>Hordeum jubatum</i> )			
First Application	2-6	17	34
Repeat Application(s) (if regrowth occurs)	2-6	17	34
Quackgrass ( <i>Agropyron repens</i> )			
First Application	4-8	17	34
Repeat Application(s) (if regrowth occurs)	4-8	17	34
Rhizome Johnsongrass ( <i>Sorghum halepense</i> )			
First Application	12-24	17	34
Repeat Application(s) (if regrowth occurs)	6-18	13	17
Wirestem Muhly ( <i>Muhlenbergia frondosa</i> )			
First Application	4-8	17	34
Repeat Application(s) (if regrowth occurs)	4-8	17	34

(1) 17 fl. oz./acre = approximately 0.4 fl. oz./1000 sq. ft.

34 fl. oz./acre = approximately 0.8 fl. oz./1000 sq. ft.

Add non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

#### DIRECTIONS FOR USE IN CONIFER TREES, NON-BEARING FOOD CROPS, AND NON-CROP OR NON-PLANTED AREAS

IMPORTANT
Plant tolerance to ENVOY Herbicide at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of ENVOY Herbicide have investigated the safety factor to plants not listed on the label.

The following plants have shown a tolerance for ENVOY Herbicide applications:

#### CONIFER TREES

ENVOY Herbicide can be used to control labeled grasses in Christmas tree farms, conifer nurseries and conifer plantations (but not in forests).

COMMON NAME	SCIENTIFIC NAME
Arboreal, American	<i>Thuja occidentalis</i>
Cedars	<i>Cedrus</i> spp.
Cypress	<i>Taxodium</i> spp.
Douglas Fir	<i>Pseudotsuga menziesii</i>
Firs	<i>Abies</i> spp.
Hemlock, Canadian	<i>Tsuga canadensis</i>
Hemlock, Western	<i>Tsuga heterophylla</i>
Pines	<i>Pinus</i> spp.
Spruces	<i>Picea</i> spp.
Yew	<i>Taxus</i> spp.

#### NON-BEARING FOOD CROPS

Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following ENVOY Herbicide application.

COMMON NAME	SCIENTIFIC NAME
Apples	<i>Malus</i> spp.
Berries	<i>Vaccinium</i> spp.
	<i>Rubus</i> spp.
Cherry, Sweet	<i>Prunus avium</i>
Citrus Fruits	<i>Citrus</i> spp.
Grapes	<i>Vitis</i> spp.
Olives	<i>Olea</i> spp.
Peach	<i>Prunum persica</i>
Pears	<i>Pyrus communis</i>
Prunes	<i>Prunus</i> spp.
Stone Fruits	<i>Prunus</i> spp.
Strawberries	<i>Fragaria</i> spp.
Tree Nuts	<i>Juglans</i> spp. (walnut)
	<i>Carya illinoensis</i> (pecan)
	<i>Pistacia vera</i> (pistachio)
	<i>Prunus dulcis</i> (almond)
	<i>Corylus maxima</i> (filbert)

#### NON-CROP OR NON-PLANTED AREAS

The following areas are considered non-crop or non-planted areas: Rights-of-way including railroads, highways, roads, dividers, medians, pipelines, public utility lines, pumping stations, transformer stations and substations, around airports, electric utilities, commercial buildings, manufacturing plants, storage yards, rail yards, fence lines, parkways, ornamental gardens, walkways and patios. Also, beneath greenhouse benches, along driveways and around golf courses.

#### RECOMMENDATIONS FOR ANNUAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

Grass Species	Scientific Name	Weed* Height - Inches	Rate fl. oz./Acre	High Rate
Barnyardgrass	<i>Echinochloa crus-galli</i>	2-8	13	17
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2-6	13	17
Brome				
California	<i>Bromus carinatus</i>	2-6	13	17
Cheatgrass	<i>Bromus secalinus</i>	2-6	13	17
Downy	<i>Bromus tectorum</i>	2-6	13	17
Ripgut	<i>Bromus diandrus</i>	2-6	13	17
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2-6**	13	17
Large	<i>Digitaria sanguinalis</i>	2-6**	13	17
Smooth	<i>Digitaria ischaemum</i>	2-6**	13	17
Southern	<i>Digitaria ciliaris</i>	2-6**	13	17
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2-6**	13	17
Fall Panicum	<i>Panicum dichotomiflorum</i>	2-8	13	17
Field Sandbur	<i>Cenchrus incertus</i>	2-6	13	17
Foxtail				
Giant	<i>Setaria faberi</i>	2-12	13	17
Green	<i>Setaria viridis</i>	2-8	13	17
Yellow	<i>Setaria glauca</i>	2-8	13	17
Goosegrass	<i>Eleusine indica</i>	2-6**	13	17
Itchgrass	<i>Rottboellia exaltata</i>	2-6	13	17
Junglerice	<i>Echinochloa colona</i>	2-6	13	17

Grass Species	Scientific Name	Weed* Height - Inches	Rate fl. oz./ Acre	High Rate
Lovegrass (Stinkgrass)	<i>Eragrostis cilanensis</i>	2-6	13	17
Red Rice	<i>Oryza sativa</i>	1-3	13	17
Rygrass				
Hardy	<i>Lolium perenne</i>	2-6	13	17
Italian	<i>Lolium multiflorum</i>	2-6	13	17
Seedling	<i>Sorghum</i>	4-10	13	17
Johnsongrass	<i>halepense</i>			
Shattercane	<i>Sorghum bicolor</i>	6-18	13	17
Southwestern	<i>Eriochloa gracillis</i>	2-6	13	17
Cupgrass				
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2-6	13	17
Bearded	<i>Leptochloa fascicularis</i>	2-6	13	17
Mexican	<i>Leptochloa uninervia</i>	2-6	13	17
Red	<i>Leptochloa filiformis</i>	2-6	13	17
Texas Panicum	<i>Panicum texanum</i>	2-6	13	17
Volunteer Cereals <sup>(3)</sup>				
Barley	<i>Hordeum vulgare</i>	2-6	13	17
Oats	<i>Avena sativa</i>	2-6	13	17
Rye	<i>Secale cereale</i>	2-6	13	17
Wheat	<i>Triticum aestivum</i>	2-6	13	17
Volunteer Corn <sup>(2)</sup>	<i>Zea mays</i>	4-12	9	13
Volunteer Corn (S.R.) <sup>(1)</sup>	<i>Zea mays</i>	4-12	17 (suppression only)	
Volunteer Corn <sup>(2)</sup>	<i>Zea mays</i>	12-24	13	17
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8-12	13	17
Wild Oats	<i>Avena fatua</i>	2-6	13	17
Wild Proso	<i>Panicum miliaceum</i>	2-10	13	17
Millet				
Witchgrass	<i>Panicum capillare</i>	2-8	13	17
Woolly	<i>Eriochloa villosa</i>	2-8	13	17
Cupgrass				

\* Generally occurs between 3-leaf stage and tillering.

\*\* Length of lateral growth.

Sethoxydim resistant volunteer corn

Includes Roundup Ready®, Liberty Link® and IMI-CORN® volunteer corn

When the cereal grain crop (wheat) is interseeded for crop establishment or is planted as wind breaks to aid crop establishment, the minimum ENVOY Herbicide use rate for control is 17 fl. oz./A.

RECOMMENDATIONS FOR ANNUAL BLUEGRASS CONTROL WITH ENVOY HERBICIDE			
Grass Species	Weed Stage	Rate fl. oz./ Acre	High Rate
Annual Bluegrass ( <i>Poa annua</i> )	to 4-Leaf	13	34
<p>Apply under favorable soil moisture and humidity which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).</p> <p>Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.</p> <p>Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.</p> <p>Always add a crop oil concentrate containing at least 15% emulsifier at 1 qt./A by ground to the finished spray volume.</p>			

## RECOMMENDATIONS FOR PERENNIAL GRASSES

- Apply only to actively growing grasses at recommended weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the recommended growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

Grass Species	Weed Height - Inches	Rate fl. oz./ Acre	High Rate
Bermudagrass ( <i>Cynodon dactylon</i> )			
First Application	3 (or up to 6" runners)	17	34
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	17	34
Fescue, tall ( <i>Festuca arundinacea</i> )			
First Application	4-8	17	34
Repeat Application(s) (if regrowth occurs)	4-8	17	34
Foxtail Barley ( <i>Hordeum jubatum</i> )			
First Application	2-6	17	34
Repeat Application(s) (if regrowth occurs)	2-6	17	34
Orchardgrass ( <i>Dactylis glomerata</i> )			
First Application(s)	4-8	17	34
Repeat Application(s) (if regrowth occurs)	4-8	17	34
Quackgrass* ( <i>Agropyron repens</i> )			
First Application	4-12	17	34
Repeat Application(s) (if regrowth occurs)	4-12	17	34
Rhizome Johnsongrass ( <i>Sorghum halepense</i> )			
First Application	12-24	17	34
Repeat Application(s) (if regrowth occurs)	6-18	13	17
Wirestem Muhly ( <i>Muhlenbergia frondosa</i> )			
First Application	4-8	17	34
Repeat Application(s) (if regrowth occurs)	4-8	17	34

\* Control of quackgrass with ENVOY Herbicide may be enhanced by adding AMS at 2.5 to 4.0 lbs./A.

## STORAGE AND DISPOSAL

### PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

### STORAGE

Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers.

Store in cool, dry place.

Do not store diluted spray.

**Emergency Response:** For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

### PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

## CONTAINER DISPOSAL

Triple rinse (or equivalent). Do not reuse container.

Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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**ENVOY®** - Reg. TM of Valent U.S.A. Corporation

**IMI-CORN®** - Reg. TM of American Cyanamid Co.

**LIBERTY LINK®** - Reg. TM AGRO EVO USA Company

**ROUNDUP READY®** - Reg. TM of Monsanto Company

Manufactured for

**Valent U.S.A. Corporation**

P.O. Box 8025

Walnut Creek, CA 94596-8025

Made in U.S.A.

EPA Reg. No. 59639-78

EPA Est. 8655-AR-01

Information contained in this booklet is accurate at the time of printing. Since product testing is a continuous process, please read and follow the directions on the product label for the most current directions and precautionary statements.

Always check with your state to verify state registration status.

### For more information call:

**1-800-89-VALENT (Professional Products)**

**www.valent.com**

9908-ENV-0001

## ALABAMA, GEORGIA & SOUTH CAROLINA

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATES OF ALABAMA, GEORGIA and SOUTH CAROLINA

### ENVOY® HERBICIDE

FOR CONTROL OF ANNUAL BLUEGRASS IN DORMANT BERMUDAGRASS TURF

EPA Reg. No. 59639-78

EPA SLN Nos. AL-990001, GA-990001, SC-980005

Active Ingredient	By Wt.
* Clethodim .....	12.6%
Other Ingredients .....	87.4%
Contains Petroleum Distillates	
*(E)-2[1-[[[(3-chloro-2-propenyl)oxy]imino] propyl]-5-[2-(ethylthio)propyl]-3-hydroxy- 2-cyclohexen-1-one	
U.S. Pat. No. 4,440,566, RE 32,489	

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Crop	Pest	Amount of ENVOY Herbicide Per Acre	Special Instructions
DORMANT BERMUDAGRASS TURF ( <i>Cynodon dactylon</i> )	Annual Bluegrass ( <i>Poa annua</i> )	34 oz./A (0.8 oz./1,000 sq. ft.)  (=0.25 lb. a.i./A)	Add non-ionic surfactant containing at least 80% a.i. at the rate of 1 pt./50 gal. of water (0.25% v/v).
LAWNS and RECREATIONAL TURFGRASS Including Residential Lawns, Commercial Landscapes, Golf Courses and Athletic Fields	<u>Apply only to bermudagrass that is completely dormant.</u> Calibrate spot sprays to deliver 34 oz. of ENVOY/Acre. Make only one application of ENVOY per use season.  Symptoms of ENVOY injury to annual bluegrass may not appear for up to 4 weeks after application.		
<u>USE PRECAUTIONS: DO NOT APPLY ENVOY TO BERMUDAGRASS THAT HAS ANY GREEN TISSUE PRESENT, OR TURF INJURY MAY RESULT.</u> Do not apply or allow drift of ENVOY on to cool season turf species, or on to dormant bermudagrass that has been overseeded with ryegrass or other cool season grasses. Do not apply ENVOY to other dormant warm season turf species. Do not apply ENVOY if rainfall is expected within one hour after application. Avoid mowing bermudagrass for one week before and after application.			

Follow all applicable directions, restrictions and precautions on the EPA-registered label. This labeling must be in the possession of the user at the time of pesticide application.

FIFRA §24(c) registrant:

**Valent U.S.A. Corporation**

P.O. Box 8025

Walnut Creek, CA 94596-8025

## ALABAMA, GEORGIA & SOUTH CAROLINA

FOR DISTRIBUTION AND USE ONLY WITHIN THE STATES OF ALABAMA, GEORGIA and SOUTH CAROLINA

### ENVOY® HERBICIDE

FOR CONTROL OF COMMON BERMUDAGRASS IN CENTIPEDEGRASS SOD

EPA Reg. No. 59639-78

EPA SLN Nos. AL-980004, GA-980006, SC-980002

Active Ingredient	By Wt.
*Clethodim .....	12.6%
Other Ingredients .....	87.4%
Contains Petroleum Distillates	
*(E)-2[1-[[[(3-chloro-2-propenyl)oxy]imino] propyl]-5-[2-(ethylthio)propyl]-3-hydroxy- 2-cyclohexen-1-one	

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.



Crop	Pest	Amount of ENVOY Herbicide Per Acre	Special Instructions
Centipedegrass ( <i>Ermochloa ophiuroides</i> )  <b><u>SOD FARMS ONLY</u></b>	Common Bermudagrass ( <i>Cynodon dactylon</i> )	17 to 34 fl. oz./A (0.4 to 0.8 fl. oz./ 1,000 sq. ft.)  (=0.125 to 0.25 lb. a.i./ A)	Add non-ionic surfactant containing at least 80% a.i. at the rate of 1 pt./ 50 gal. of water (0.25% v/v).  TWO APPLICATIONS WILL LIKELY BE NECESSARY FOR CONTROL. <b>Second application should not be made until 1 to 2 inches of new growth of bermudagrass is observed (approximately 3 to 4 weeks after first application). Use higher labeled rates for more established bermudagrass.</b>  Do not apply more than 68 fl. oz. of ENVOY Herbicide/ acre/season.
<b>USE PRECAUTIONS:</b> Do not apply to centipedegrass being grown for seed. Do not apply ENVOY Herbicide until 3 weeks after 100% greenup of centipedegrass in spring. Do not treat or allow drift of ENVOY Herbicide onto other turf species, or damage may result. Do not apply ENVOY Herbicide if rainfall is expected within one hour after application. Avoid mowing sod for one week before and after application.			

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Follow all applicable directions, restrictions and precautions on the EPA-registered label. This labeling must be in the possession of the user at the time of pesticide application.

FIFRA §24(c) registrant:

**Valent U.S.A. Corporation**

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Walnut Creek, CA 94596-8025